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CLAIMS

1. A system for mobile radio communication, including:
 - a network having one or more radio base stations and a central station;
 - 5 an on-board radio station having a relatively long range for communication with other stations; and
 - a portable radio station having a relatively short range for communication with other stations;

wherein the on-board station receives and forwards messages between the portable station and the network when the on-board station is within range of the network but the portable station is out of range of the network.
- 10 2. A system according to claim 1 wherein the on-board station receives and forwards emergency messages from the portable station to the central station.
- 15 3. A system according to claim 1 wherein the portable station and the on-board station communicate short data messages or voice messages over a half-duplex radio channel.
- 20 4. A system according to claim 1 wherein the portable and on-board stations each have a duplex mode for communication with the network by voice or data calls and a half-duplex mode for communication between each other by short messages.
- 25 5. A system according to claim 1 wherein the on-board station is carried by a vehicle and the portable station is carried by an individual associated with the vehicle.
6. A method of communication in a mobile radio system, including:
 - determining in a portable radio station that network coverage is not available at the portable station;
 - 30 transmitting a message from the portable station over a half-duplex channel to an on-board radio station at which network coverage is available; and

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forwarding the message from the on-board radio station to a central station in the system.

7. A method according to claim 6 wherein the on-board station receives messages from the portable station on one channel and transmits the messages on a different channel.
8. A method according to claim 6 wherein the message is an emergency message.
- 10 9. A method of communication in a mobile radio network, including:
receiving a message at a first radio station at which network coverage is available, from a second radio station at which network coverage is not available;
determining that the message is addressed to a central radio station in the network; and
15 forwarding the message from the first station to the central station through the network.
10. A method according to claim 9 wherein the first and second stations are on-board and hand-portable stations respectively, and the message is transmitted on a half duplex channel.